The Roots of Oregon's Campus Planning Tradition

When the University of Oregon began to plan for the expansion of its science facilities in the mid-1980s, it drew upon long-standing ideas about how the campus should be designed. Early campus plans had established the idea that the science complex should consist of a discrete group of buildings, in campus planning terms a "quad." Those early plans also had established an image of what the campus should look like and a clear concept about how new growth should be organized: primarily along two intersecting axes.

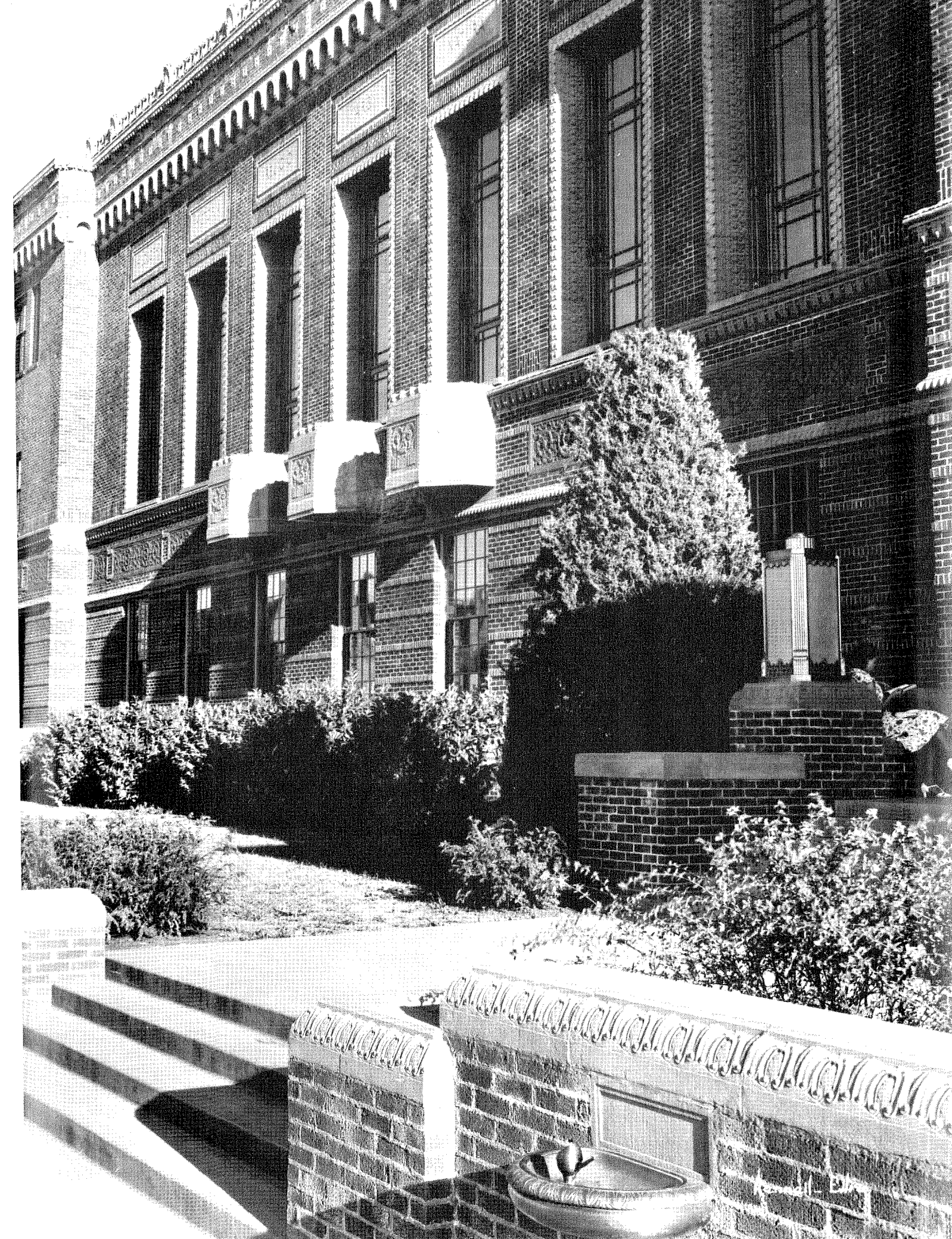
But for many years those traditions had been abandoned, and the continuity of form that had characterized campus development during the school's first 75 years had been lost. The science complex, the first large-scale development on campus in many years, provided an opportunity to restore some of that order while testing new ideas about how growth decisions should be made.

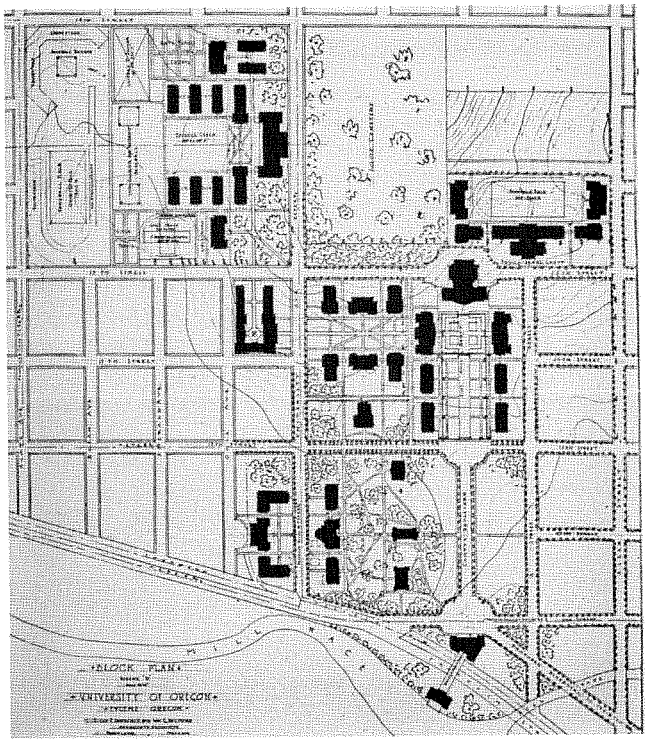
The University of Oregon was established in 1872 and grew slowly for the next 40 years. In 1914, the University retained architect Ellis F. Lawrence of Portland to develop a plan for future campus development. His appointment began a productive association with the University that lasted until his death in 1946. During his tenure he modified and revised the plan for the campus (once in 1923 and again in 1932), designed virtually every campus building put up in those formative years and served as the first dean of the University's School of Architecture and Fine Arts.

Lawrence's leadership established a campus character that remains strongly evident. The concepts of spatial organization articulated in his plans reflected his Beaux Arts training and were given physical substance by the buildings he designed. After Lawrence's death the University experimented with other campus planning ideas and architectural styles. But there is still overwhelming sentiment on campus and within the larger community for preserving, strengthening and expanding the quads, greens, malls and promenades that are the essence of the character Lawrence established.

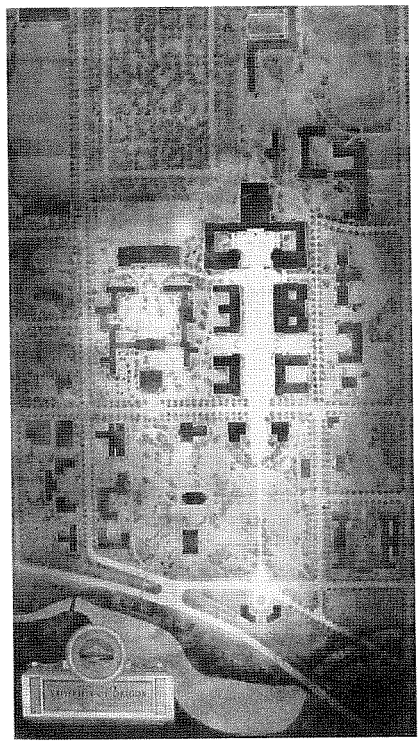
J. David Rowe

Ellis F. Lawrence's Knight Library exemplifies the architectural character he wanted to establish on the campus. Photo courtesy University of Oregon Archives.





One version of Ellis F. Lawrence's 1914 campus plan.



Lawrence's 1923 revision of the plan.

Ellis F. Lawrence's Vision

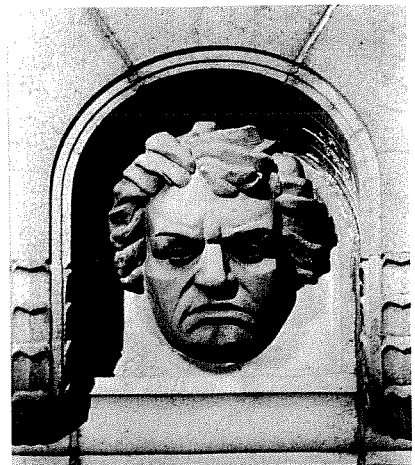
In his 1914 plan for the campus, Ellis F. Lawrence established two principal axes (one oriented north–south and the other east–west) and proposed several quads around which buildings would be grouped. Each building would be large enough to have its own identity but not so large as to be a dominating object. The arrangement of buildings established clear paths of pedestrian circulation and coherent open spaces.

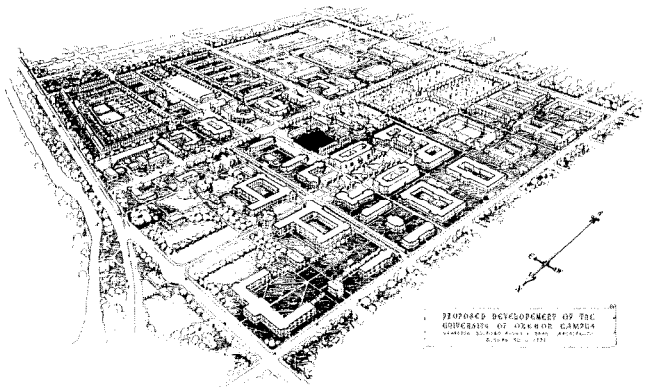
These ideas guided future growth in a manner that complemented the existing campus. Lawrence designed 17 campus buildings, which varied in architectural style but achieved the "harmony in diversity" he valued. Masonry construction (when the budget allowed), attractive detailing and integrated art works helped to create a visually unified campus.

1930s Revision and Redirection

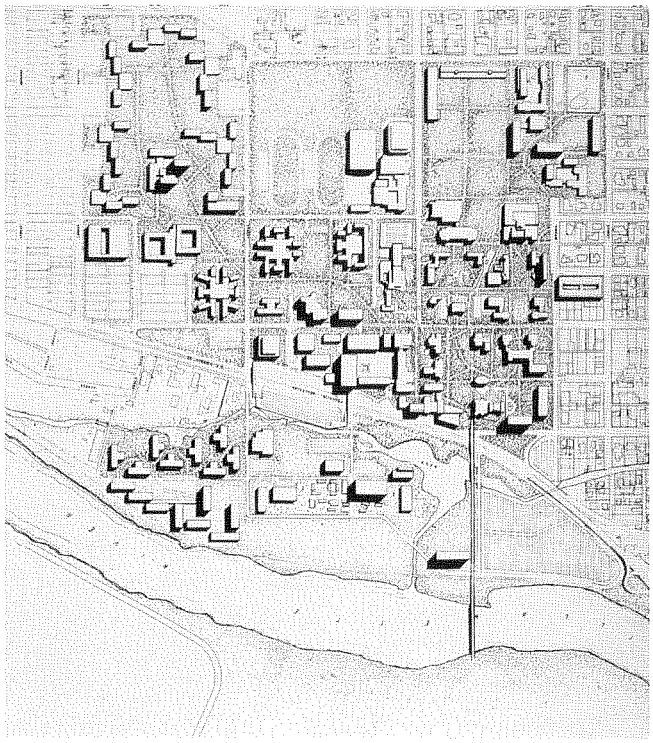
In the 1932 revised plan, Lawrence reaffirmed the basic organization of the campus. He also undertook to "locate approximately the major groups of the departments and schools so that each may best function in its relation to the entire group." He identified a prominent location for a "Science Grouping": on the main quad, close to the library (in one study, a "Science Hall" was considered as the head of a new quadrangle west of the main quad).

Below: This gargoyle on Knight Library is an example of the collaboration between architect and artist Lawrence promoted.





Lawrence's 1932 revision of the plan.



A 1960's proposal for growth, based on Lawrence Lackey's 1962 plan.

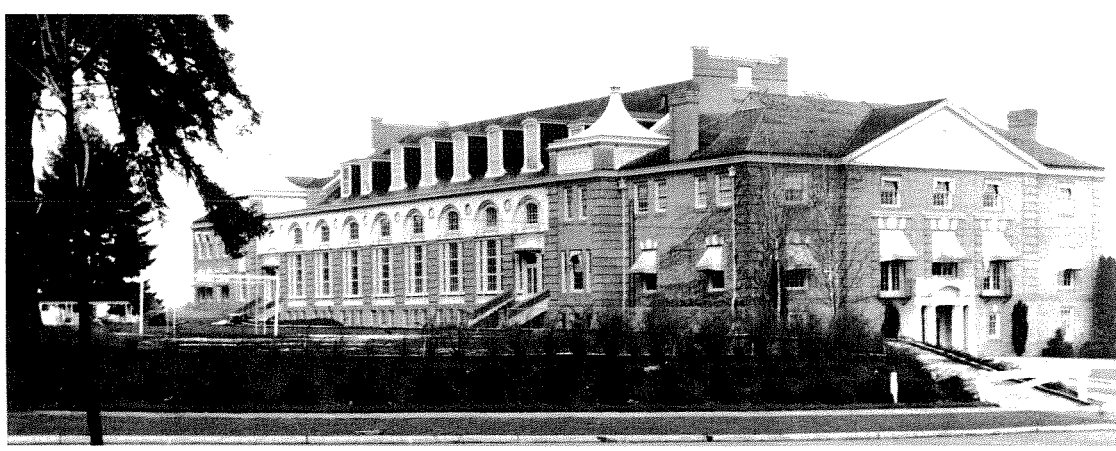
But the "Science Grouping" was never built. Just as the 1932 plan was being adopted, the State Board of Higher Education, hoping to strengthen the new state system of higher education and eliminate duplicate courses, voted to transfer upper-division and graduate studies in the sciences to Oregon Agricultural College (now Oregon State University). A decade later the Board reversed itself and returned upper-division and graduate studies in the sciences to the University. To provide space for these programs, the University built Science Main (now Pacific Hall) north of 13th Avenue in 1950.

1960s Expansion and Infill

Lawrence's 1932 plan also argued the need for acquiring property and expanding the campus to the west; however, the University decided to limit development to land it already owned. But by 1960 the campus had no more room to expand. By now the most realistic opportunities for expansion were to the east (into a modest, low-density residential area) and north (onto land between the railroad and the river, then being used as a sand and gravel quarry).

In 1962, the University selected urban designer Lawrence Lackey to prepare a new plan, primarily to provide direction for eastward expansion. Lackey presented a scheme for large-scale dormitory development filling in the existing campus and on property east of the campus (acquired in part as an urban renewal project). This plan, typical of the functional plans being prepared at the time, reinforced the notion of Lawrence's academic groupings and suggested developing a significant portion of the area around Science Main for science facilities. Several buildings were added in the general vicinity between 1960 and 1971, and a nearby Lawrence building (built in 1935) was converted to house the geology department and expanded to include a small accelerator.

By 1972, most of the buildings proposed in the Lackey plan had been built and the plan offered no guidance for further expansion.



Far left and right: Exterior and the sun room of the Women's Memorial Building, designed by Lawrence.

Drawings courtesy University of Oregon Planning Office.
Photos courtesy University of Oregon Archives.

A Renewed Search for Order

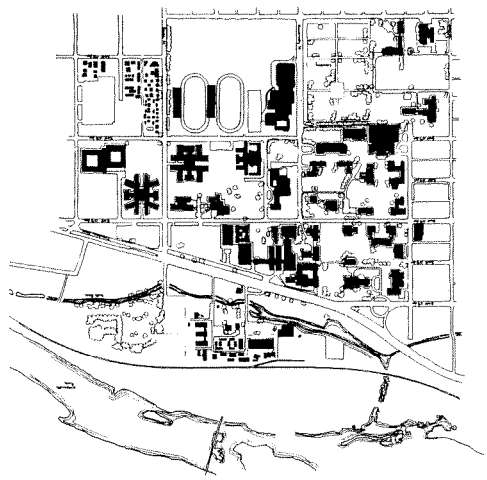
In the early 1970s the University decided any new plan would have to incorporate a planning process, not just a new map, and that the process should reflect the long-standing tradition of faculty participation in University governance. The University retained the Center for Environmental Structure, and the result of that consultation, published as *The Oregon Experiment*, was adopted in principle as the basis for campus planning in 1974.

The Oregon Experiment rests on six fundamental principles or premises. They are: "organic order," "user participation," "piecemeal growth," "patterns," "diagnosis" and "coordination." Although each of these principles is important by itself, the group achieves its full significance because of the way in which the principles interact with each other.

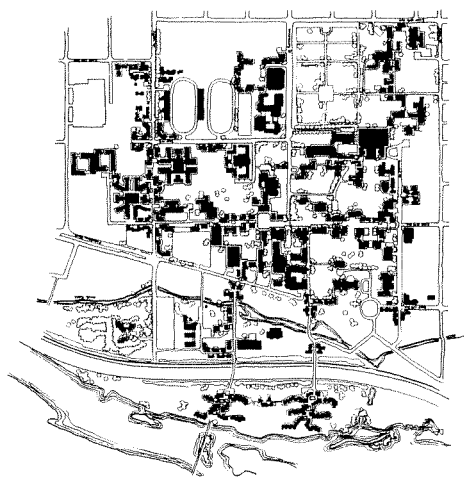
Together, these principles suggest that the physical environment develops over time as a result of many separate acts, most of which are, or ought to be, relatively small in scale. Order is injected into this situation not by slavish adherence to a preconceived image of the way things ought to be, but as an expression of commonly held values of the community.

The chances for a successful project can be increased if people who are affected by an environment are intimately involved in planning its modification and improvement, if they are provided with a mechanism that allows them to focus their attention on the relationship between that environment and their own lives, if they are allowed to articulate their values in a way that physical substance can be derived from them, and if these processes are supported at the institutional level at which overall objectives of the larger community are protected and nourished.

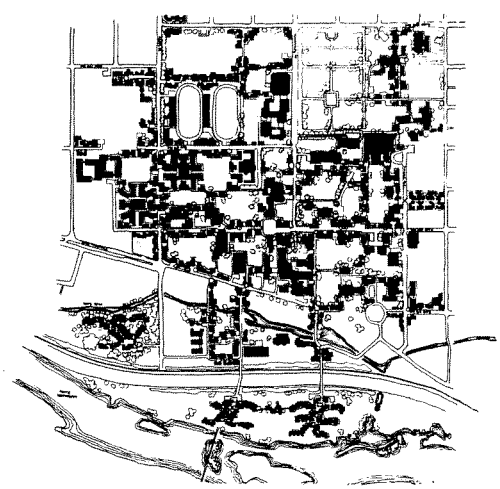
With each project it has undertaken since 1975, the University has learned a bit more about ways in which the application of these principles affects the built environment and the relationships among the people who inhabit it. For a number of reasons, the science complex expansion constituted the greatest challenge yet.



Campus 1973



Possible outcome of growth during the 1980s



Possible outcome of growth during the 1990s

These drawings envision how a large number of small-scale projects built in piecemeal fashion could, over time, define outdoor spaces and strengthen paths. From Christopher Alexander, *The Oregon Experiment*, © 1975 Oxford University Press. Reprinted by permission.

Piecemeal growth

This principle suggests that smaller projects are less likely to be irrevocably disruptive to the environment than large projects. They are more likely to lend themselves to repair and adaption of the environment as a whole.

This principle does not suggest that large buildings never be built, but only that smaller projects dominate the list of construction activities. For many years, the University had not been troubled by the prospect of "large lump" development; resources for such projects simply had not been available.

When the "large lump" opportunity of the science complex expansion did arise, the University did not abandon the principle of piecemeal growth. From the beginning, there was almost unanimous agreement among science users, Campus Planning Committee members and the administration that the project should consist of several smaller buildings, each sited and designed to stand alone should a disruption of funding occur. The project also included two smaller buildings, put up elsewhere on the campus, that provide space for activities displaced by the new buildings.

User participation

The principle of active and collaborative user participation in the design process (as opposed to the more traditional "review and react" role of end users), holds that the people whose lives (and, in this case, professional productivity) will be most affected by a facility ought to have a large voice in its planning and development.

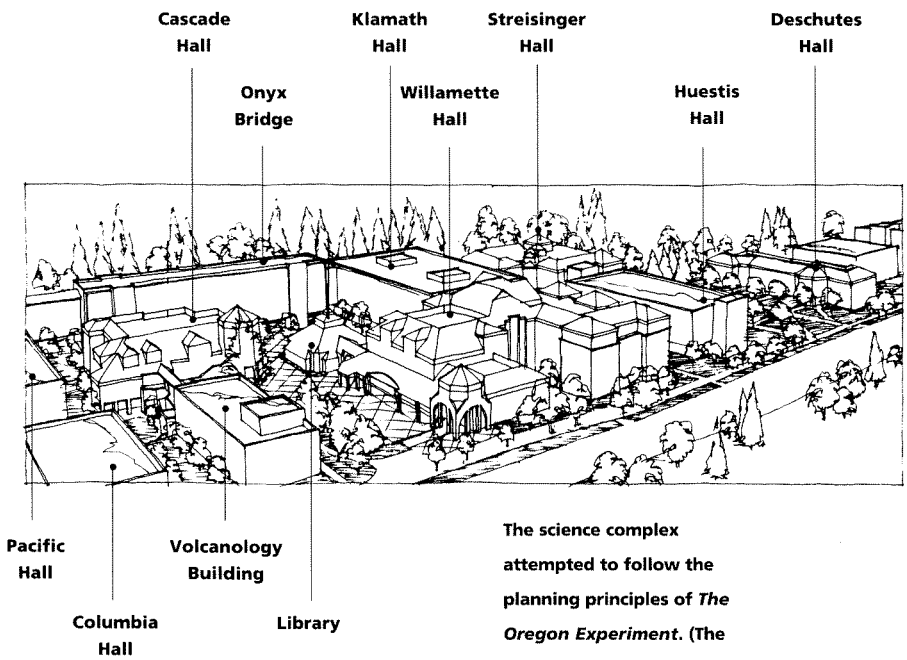
Critics of this notion suggest that involving users this intensely invites disorganization and that the overall institutional interests that transcend the bounds of user groups will be subordinated to the parochial interests of the users. In practice, this has not been an overriding problem because of the interactive effects of the principle of coordination.

Coordination

This principle reminds us that the institution as an entity has a major stake in all campus development, just as the participating users have a stake in the specific project. If involving users through collaborative participation is helpful and productive, the same principle should apply to the way in which larger institutional objectives are looked after. The principles of user participation and coordination are addressed simultaneously in the way that the collaboration is organized; the interests of both users and the institution are represented in the process from the outset.

More than a hundred individuals were directly and collaboratively involved in planning the science complex. Participants included not only science faculty and staff, but also representatives from other faculties, the Campus Planning Committee, the central administration and the University's Physical Plant department. The full participation of this diverse population tended to stimulate a balanced discussion of the issues in a way that assured promotion of larger campus-wide concerns.

Equally important, this broad discussion contributed to the development of a sense of stewardship among the direct users. Representatives from the science departments began to sense their own responsibilities for the care and health of the rest of the campus and often led discussions of how to take advantage of the opportunity this project offered to improve the quality of the campus as a whole. During the inevitable process of balancing the user's requests with available resources, the science faculty willingly opted to absorb a 12 to 14 percent cut in assignable space in order to leave intact the budget allocations for landscaping, building finishes and the other design features that served to more completely and sensitively integrate the new building complex into the overall fabric of the campus. Clearly, parochial interests neither unduly dominated the process nor distorted the final product.



The science complex attempted to follow the planning principles of *The Oregon Experiment*. (The library was not built). Courtesy The Ratcliff Architects.

Patterns

Patterns are statements that describe a design situation or problem, analyze it in terms of available information and suggest ways in which the problem might be resolved. Collectively, a group of patterns forms a "pattern language." The principle of patterns suggests that a language for communicating values, as they pertain to the environment and people's relationship to it, must be developed in order to provide a means for focusing the energies of users on the issues that are central to a project.[1]

Before interviewing architects who would work on the project, a committee of users agreed upon several patterns that should be considered in the design. The committee incorporated them, along with a brief explanation of their importance, into the "Manual for Prospective Architectural Consultants," which became the basic document for describing to designers what their assignment would be.

In putting the manual together, the University Planning Office and the Campus Planning Committee identified several existing patterns that underscored the need for integrating the new complex into the campus and suggested how it could be done. Some of these patterns were modified to reflect the users' aspirations more accurately. The science faculty developed a special pattern ("Horizontal and Vertical Integration") to support interdisciplinary activity in science research; this pattern made the most significant contribution to our concept of the project as a whole. Finally, the design team developed a number of patterns during the course of discussions with users.

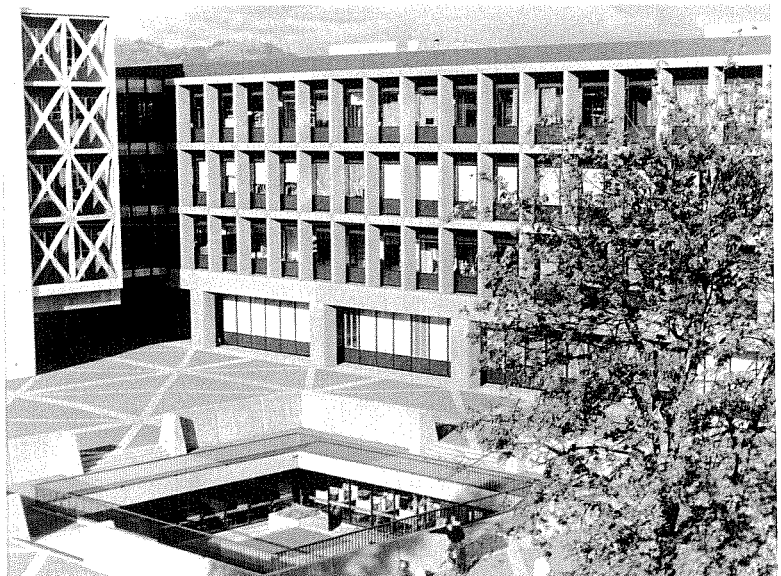
Diagnosis

Diagnosis addresses the need to understand what is right and what is wrong with the campus environment at any given point in time.[2]

In this case, the diagnostic process confirmed the conventional wisdom: The site of the existing science complex was one of the most unpleasant places on campus, generally disconnected from principles of spatial organization evident in other areas. The buildings were unrelated to each other or to anything else in style or scale, and the complex lacked a unifying element.

This diagnosis, developed in the early stages of planning for the science complex, was agreed to by the Campus Planning Com-mittee and the Core Users Committee. Present-ed in the "Manual for Prospective Architectural Consultants," it became the well understood communal charge to the design team.

The planning committees asked the design team to help repair this site by considering ways to strengthen the relationships among the site, the campus and the surrounding community. They also asked the design team to help introduce elements that would restore human scale to the place and to help achieve what Lawrence might have envisioned as he concluded his narrative of the 1932 revision to the campus plan: "The outward aspect of the physical plant of a University should exemplify the teaching of that University — in good taste, beauty and efficiency."



The science complex before the new buildings were put up. The white building (above) is on the site of the new Willamette Hall.
Photo above courtesy The Ratcliff Architects.
Right photo courtesy University of Oregon Archives.

Why Collaboration Worked

There are probably two reasons why this complicated process worked so well at the University. First, the state of Oregon has a long tradition of citizen participation. The initiative and referendum processes were developed here; recent state laws have mandated citizen participation at all levels of land use planning. At the University, there is a well-established tradition of faculty governance. For the last 20 years, students have participated in the University governing senate. To suggest that users ought to have a major voice in the development of their own facilities is not revolutionary here but follows tradition and expectations.

The second reason is that Ellis Lawrence's work inspired a strong aesthetic for the campus; for a long time there has been a very clear perception among students, faculty, staff and alumni of what the campus should look like. The fundamental pattern of site repair, regularly referred to in the planning of large and small projects, is very consistent with this long-standing aesthetic. There is general agreement in the campus community that most of the "aberrations" built in the 1950s do not fit this aesthetic and that new buildings should adhere more closely to the beauty of Lawrence's concepts of grouping and open spaces. The malls and courts of the science complex expansion link the smaller buildings in a fashion consistent with the plans Lawrence established in 1914.

If not for these two traditions, the outcome of the science complex expansion might have been quite different, with or without the process to which Alexander contributed greatly. That process, which the science complex architects took quite seriously, continues to evolve on the Oregon campus. The most recent result of that evolution is a complex of buildings and spaces that pleases the users, honors tradition and is a credit to the institution and the state.

Notes

1. Two works by Alexander and his associates at the Center for Environmental Structure provide the theoretical and operational bases for this principle. They are *The Timeless Way of Building* (New York: Oxford University Press, 1979) and *A Pattern Language* (New York: Oxford University Press, 1977).

2. *The Oregon Experiment* (New York: Oxford University Press, 1971) suggests that a complete diagnosis be undertaken and formally adopted on an annual basis. For a number of reasons, chief among them the amount of staff and financial resources required for such an endeavor, a comprehensive diagnosis of the entire campus has not been undertaken since *The Oregon Experiment* was adopted.

Credits

Oregon State System of Higher Education: W. C. Neland, Associate Vice Chancellor; Richard Perry, Associate Vice Chancellor; Arthur A. Mancl, Director, Building and Planning.

University of Oregon Administration: Paul Olum, President; Richard J. Hill, Provost and Vice President; Dan Williams, Vice President, Administration; John Moseley, Vice President, Research; Richard Hersh, former Vice President, Research; Robert Berdahl, Dean, Arts and Sciences.

University of Oregon Planning Office: J. David Rowe, Campus Planner; Fred Tepfer, Associate Planner; Loren Allen, Lyle Hall, Martin Bailkey, Shawn Peterson.

Physical Plant:
Harold Babcock, *Director;* Garry Fritz, *Construction Project Manager;* Ted Burns, Don Ferguson, Clifford Flacy, Alex Gordon, Harold Hepner, Mike Hostetler, Janet Lobue, David Oliver, Dale Reddon, Tim King, John Evans, Paul Petersen, Bill Norwood, Jim Davis, Roberta Squires.